

WHAT IS CLAIMED IS:

1 A method of inhibiting the growth of hematopoietic cells comprising:

5 contacting a plurality of hematopoietic cells with a growth inhibiting amount of a capsid agent selected from the group consisting of a recombinant B19 parvovirus capsid, a recombinant B19 parvovirus VP2 capsid, and a fragment of a recombinant B19 parvovirus VP2 capsid, wherein said fragment is at least three amino acids in length; and

measuring the inhibition of growth of said hematopoietic cells.

10 2. The method of Claim 1, wherein a growth inhibiting amount of the recombinant B19 parvovirus capsid is contacted with said plurality of hematopoietic cells.

3. The method of Claim 1, wherein a growth inhibiting amount of the recombinant B19 parvovirus VP2 capsid is contacted with said plurality of hematopoietic cells.

15 4. The method of Claim 1, wherein a growth inhibiting amount of the fragment of a recombinant B19 parvovirus VP2 capsid is contacted with said plurality of hematopoietic cells.

5. The method of Claim 4, wherein said fragment consists of the sequence glutamine-glutamine-tyrosine.

6. The method of Claim 4, wherein said fragment consists of the sequence of **SEQ. ID. No. 5.**

20 7. The method of Claim 1, wherein said measuring step comprises observing a reduction in the presence of a hematopoietic cell.

8. The method of Claim 1, wherein said measuring step involves observing a reduction in red blood cell hematocrit.

9 A method of inhibiting the proliferation of endothelial cells comprising:

25 contacting a plurality of endothelial cells with a proliferation inhibiting amount of a capsid agent selected from the group consisting of a recombinant B19 parvovirus capsid and a recombinant B19 parvovirus VP2 capsid; and

measuring the inhibition of proliferation of said endothelial cells.

30 10. The method of Claim 9, wherein a proliferation inhibiting amount of the recombinant B19 parvovirus capsid is contacted with said plurality of endothelial cells.

11. The method of Claim 9, wherein a proliferation inhibiting amount of the recombinant B19 parvovirus VP2 capsid is contacted with said plurality of endothelial cells.
12. The method of Claim 9, wherein said measuring step comprises observing a reduction in the presence of an endothelial cell.
- 13 A method of inhibiting the migration of endothelial cells comprising:
 - contacting a plurality of endothelial cells with a migration inhibiting amount of a capsid agent selected from the group consisting of a recombinant B19 parvovirus capsid, a recombinant B19 parvovirus VP1 capsid, and a recombinant B19 parvovirus VP2 capsid; and
 - measuring the inhibition of migration of said endothelial cells.
14. The method of Claim 13, wherein a migration inhibiting amount of the recombinant B19 parvovirus capsid is contacted with said plurality of endothelial cells.
15. The method of Claim 13, wherein a migration inhibiting amount of the recombinant B19 parvovirus VP1 capsid is contacted with said plurality of endothelial cells.
16. The method of Claim 13, wherein a migration inhibiting amount of the recombinant B19 parvovirus VP2 capsid is contacted with said plurality of endothelial cells.
17. The method of Claim 13, wherein said measuring step involves observing a reduction in metastasis or angiogenesis.
- 18 A method of inhibiting the growth of hematopoietic cells comprising:
 - identifying a subject in need of an inhibition of growth of hematopoietic cells; and
 - providing to said subject a growth inhibiting amount of a capsid agent selected from the group consisting of a recombinant B19 parvovirus capsid, a recombinant B19 parvovirus VP2 capsid, and a fragment of a recombinant B19 parvovirus VP2 capsid, wherein said fragment is at least three amino acids in length.
19. The method of Claim 18, wherein a growth inhibiting amount of the recombinant B19 parvovirus capsid is provided to said subject.

20. The method of Claim 18, wherein a growth inhibiting amount of the recombinant B19 parvovirus VP2 capsid is provided to said subject.
21. The method of Claim 18, wherein a growth inhibiting amount of the fragment of a recombinant B19 parvovirus VP2 capsid is provided to said subject.
- 5 22. The method of Claim 18, wherein said fragment consists of the sequence glutamine-glutamine-tyrosine.
23. The method of Claim 18, wherein said fragment consists of the sequence of **SEQ. ID. No. 5**.
24. The method of Claim 18, wherein said subject has a hematological proliferative disorder.
- 10 25. The method of Claim 24, wherein said hematological proliferative disorder is Polycythemia Vera.
- 26 A method of inhibiting the proliferation of endothelial cells comprising:
- 15 identifying a subject in need of an inhibition of proliferation of endothelial cells; and
providing to said subject a proliferation inhibiting amount of a capsid agent selected from the group consisting of a recombinant B19 parvovirus capsid and a recombinant B19 parvovirus VP2 capsid.
27. The method of Claim 26, wherein a proliferation inhibiting amount of the recombinant B19 parvovirus capsid is provided to said subject.
- 20 28. The method of Claim 26, wherein a proliferation inhibiting amount of the recombinant B19 parvovirus VP2 capsid is provided to said subject.
- 29 A method of inhibiting the migration of endothelial cells comprising:
- 25 identifying a subject in need of an inhibition of migration of endothelial cells; and
providing to said subject a migration inhibiting amount of a capsid agent selected from the group consisting of a recombinant B19 parvovirus capsid, a recombinant B19 parvovirus VP1 capsid, and a recombinant B19 parvovirus VP2 capsid.
- 30 30. The method of Claim 29, wherein a migration inhibiting amount of the recombinant B19 parvovirus capsid is provided to said subject.

